## REMARKS

The present application contains claims 7-24, 28, 32, 37, 38, 41, 42, 44, and 46-53. No new claims are added by this Amendment. Claims 7-23 are allowed. The only independent claims remaining for the Examiner's consideration are claims 24, 28, 32, and 44, all of which have been amended. For purposes of this Preliminary Amendment only, the applicant relies on the same features in all of those claims to support patentability.

A supplemental reissue declaration to cover the claim amendments made herein is enclosed.

The claims shown above appear as they will in the reissue patent issuing from the present application (that is, with added text underlined and deleted text in brackets), assuming that the present Amendment is deemed to place the application in condition for allowance. The claim changes made by the present Amendment are shown in the Appendix by underlining text added to the claims and striking through text deleted from the claims.

The features introduced into the independent claims are supported in the applicant's original disclosure as follows (references are to the applicant's original U.S. Patent 5,661,645):

- an electrical input voltage having an operating range with a lower limit voltage sufficient to activate the LEDs: col. 6, lines 27-30 (the input voltage has an operating range with a lower limit of 85 volts when the solid state traffic controller switch is on).
- a transistor having an essentially nonconductive condition whenever the electrical input voltage is at or above the operating range lower limit voltage: Col. 7, lines 63-66 (the transistor Q2 is turned off to remove the resistor 60 from the circuit when the traffic controller switch is on).

- the transistor has an essentially conductive condition if the electrical input voltage drops to a predetermined value below the operating range lower limit voltage: col. 7, lines 41-46 (the transistor Q2 is turned on when the traffic controller switch is off and the input voltage drops to 40 v.a.c., which is below the 85 v.a.c. operating range lower limit).
- the transistor in the essentially nonconductive condition prevents dissipation of power from the power supply output through the low impedance load whenever the electrical input voltage is within the operating range: col. 7, line 65, to col. 8, line 1 (the transistor Q2, when off, removes the resistor 60 from the circuit "thereby preventing unnecessary dissipation of power.")

Of course, pointing out where the specification describes preferred embodiments of claim features does not limit the claims to those embodiments. Accordingly, the above discussion should not be taken as an indication that the claims are so limited.

The claims were rejected under 35 U.S.C. § 103(a) as reciting subject matter that would have been obvious from U.S. Patent No. 5,463,280 to Johnson, the Power Supply Cookbook, the Motorola data sheet for the MC 34261 controller, admitted prior art (Fig. 1 of the present application), and U.S. Patent 5,075,601 to Hildebrand. This discussion focuses on the differences between Hildebrand and the applicant's claimed conflict monitor compatibility circuit, but that should not be taken as an indication that the applicant believes that the other references are applicable to the claims in the manner suggested in the Office Action.

RESPONSE TO REJECTIONS

It is important to keep in mind that what mainly distinguishes Hildebrand's "dynamic load circuit" from the applicant's claimed conflict monitor compatibility circuit is not that the

applicant's circuit shunts leakage current through a low impedance load when a solid state traffic controller is off. The applicant's circuit does that, but it also provides a significant advantage over the Hildebrand circuit during normal operation, when the traffic controller switch is on.

In that respect, Hildebrand's circuit has a major shortcoming, namely that it dissipates a significant amount of power through the resistor R7 at input voltages sufficient to activate LEDs. This is seen in Exhibit B to the Declaration of Peter A. Hochstein, dated April 12, 2007 ("the Hochstein Declaration"), submitted with the Preliminary Amendment of April 13, 2007. The second plot in Hochstein's Exhibit B shows that at the lower end of an LED's operating range, the Hildebrand circuit dissipates over 4 watts of power. The same plot shows the marked contrast provided by a conflict monitor compatibility circuit in accordance with the applicant's claims 24, 32, 36, and 44, which can dissipate as little as about 0.2 watts. (The applicant's independent claims reflect this advantage by reciting that the claimed circuit "prevents dissipation of power from the power supply output through the low impedance load whenever the electrical input voltage is within the operating range.")

The 4 watts of power dissipated by Hildebrand's dynamic load circuit makes it particularly unsuitable for use with LEDs. For example, recent LED traffic signals are rated as low as 6 watts. Hochstein Declaration, para. 26 and Exhibit C. Dissipating as much as 4 watts would mean that nearly as much power is wasted as is used by the LEDs.

The applicant's conflict monitor compatibility circuit achieves this advantage over Hildebrand by using a transistor "biased as a switch having an essentially nonconductive condition whenever the electrical input voltage is at or above the operating range lower limit voltage." Hildebrand's MOSFET Q3, likened by the Examiner to the applicant's transistor biased as a switch (Office Action, pages 3, 6 , and 8), is conductive at and above the lower limit

of a voltage operating range sufficient to activate LEDs. This is shown in the first plot in Exhibit B of the Hochstein Declaration, which compares the current through the applicant's claimed low impedance load to the current through Hildebrand's resistor R7. That plot establishes that a circuit in accordance with Hildebrand's disclosure conducts about 53 milliamps at the lower limit of a typical LED operating voltage range, while the applicant's switch-biased transistor conducts about three milliamps at the same voltage.

Accordingly, the applicant's claimed conflict monitor compatibility circuit is clearly patentably distinct from Hildebrand's dynamic load circuit, as established by the evidence in the Hochstein Declaration.

The applicant notes that the Office Action fails to discuss the Hochstein Declaration. According to the Manual of Patent Examining Procedure, 8th ed., Rev. 6, Sept. 2007 ("MPEP"):

> Evidence traversing rejections, when timely presented, must be considered by the examiner whenever present. All entered affidavits, declarations, and other evidence traversing rejections are acknowledged and commented upon by the examiner in the next succeeding action.

MPEP § 716.01(B), at 700-289.

The instruction to consider evidence of nonobviousness submitted in a timely declaration is repeated at MPEP § 716.01(a), at 700-289 ("Objective Evidence Must Be Considered When Timely Presented"). That consideration must be in accordance with the following principles:

> When an applicant timely submits evidence traversing a rejection, the examiner must reconsider the patentability of the claimed invention. The ultimate determination of patentability must be based on consideration of the entire record, with due consideration to the persuasiveness of any argument and any secondary evidence to the contrary.

MPEP § 617.01(d), at 700-291. See also In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984) ("If rebuttal evidence of adequate weight is produced, the holding of *prima facie* obviousness, being but a legal inference from previously uncontradicted evidence, is dissipated.").

In preparing the current Office Action, dated July 16, 2007, the Examiner appears not to have considered the Hochstein Declaration, which was previously and timely submitted with the Preliminary Amendment dated April 13, 2007. Accordingly, if the Examiner still believes that the present application is not allowable upon reconsideration of the patentability of the applicant's invention in light of this Amendment and the previously submitted Hochstein Declaration, the applicant respectfully submits that it would be premature to make the next rejection final.

It also appears from the Office Action's application of Hildebrand to the applicant's claims that the Examiner did not take into account the actual claim language presented in the Preliminary Amendment. For example, the Office Action refers to "the claimed clamp circuit's 'voltage sensing means'" and "the claimed conflict monitor circuit's 'control load means'." Office Action, pages 3, 4, 6, and 8. However, the rejected claims did not recite a "clamp circuit" with a "voltage sensing means," or a "control load means." (The applicant assumes that the reference to a "conflict monitor circuit" was meant to be to the claimed conflict monitor *compatibility* circuit.)

If the Examiner again rejects any of claims 24, 28, 32, and 44, the applicant respectfully requests that he explain how he applied the references, especially Hildebrand, to the actual claim language, rather than any recharacterizations of it. The applicant very carefully chose the language used to recite the claimed conflict monitor compatibility circuit, to ensure that the claims are patentable over Hildebrand. The applicant requests that the Examiner, in turn, indicate precisely where in Hildebrand he has found a disclosure of each of the features of the applicant's circuit, exactly as it is claimed.

The Examiner also quotes from the court's opinion in *Relume Corp. v. Dialight Corp.*, 63 F.Supp.2d 788 (E.D. Mich. 1999), particularly the portion relating to the applicability of Hildebrand to claim 6 of original U.S. Patent 5,661,645. It should go without saying that the claims now presented are different from claim 6 of the original '645 patent. Therefore, it is self-evident that the findings of the court relative to that claim are, at best, of limited probative value in determining the patentability of the claims now under consideration.

The applicant now claims a conflict monitor compatibility circuit, rather than original claim 6's "adaptive clamp circuit means" with "voltage sensing means" and a "controlled load means." Among the features of the applicant's claims presented in this Amendment missing from original claim 6 are an "electrical input voltage having an operating range with a lower limit voltage sufficient to activate the LEDs," a "transistor . . . biased as a switch having an essentially nonconductive condition whenever the electrical input voltage is at or above the operating range lower limit voltage," and the operational characteristic wherein "the transistor in the essentially nonconductive condition prevents dissipation of power from the power supply output through the low impedance load whenever the electrical input voltage is within the operating range." At least these claim features distinguish the applicant's invention over Hildebrand, and none of them are discussed in the Court's opinion.

The Examiner quotes from the portion of the Court's opinion finding that "the Hildebrand circuit . . . completely removes this resistor (R7) from the circuit when the light is on." This is true only so far as the resistor is removed when the applied voltage is 140 v.a.c. (See the far right end of the first plot of Exhibit B of the Hochstein Declaration, where the current through the resistor approaches the level obtained by the applicant's conflict monitor compatibility circuit.) However, at the lower limit of an LED operating range, as shown on this plot,

Hildebrand's resistor R7 is still very much "in" the circuit, which is shown by the current level at that voltage. Thus, the Court's opinion in fact has no bearing on the patentability of the present claims.

In addition, the Court suggests that its conclusion concerning the invalidity of claim 6 might have been different if the claim had recited the reduced power dissipation achieved by the applicant's circuit. 63 F.Supp.2d at 825. Claims 24, 28, 32, and 44 now presented do recite the prevention of power dissipation as a feature of the applicant's conflict monitor compatibility circuit.

For all of the reasons discussed above, the applicant requests that the rejections be withdrawn.

## SUBMISSION OF AMENDED DRAWING

The Preliminary Amendment included a Submission of Amended Drawing to make a minor change to Fig. 6a. The Office Action does not indicate what action was taken regarding the proposed amended Fig. 6a.

The applicant respectfully requests that the next communication in this application indicate the action taken by the Examiner on the proposed change to that drawing figure.

## SUPPLEMENTAL REISSUE DECLARATION

A Supplemental Declaration for Reissue Patent Application To Correct "Errors" Statement (37 CFR 1.175) (Form PTO/SB/51S), executed by the inventor is enclosed.

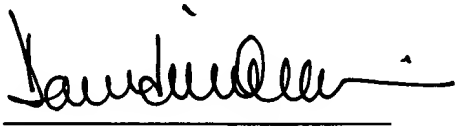
## SUMMARY

For all of the reasons put forward above, the applicant believes that added reissue claims 24, 28, 32, 37, 38, 41, 42, 44, and 46-53 are patentable, and requests that they be allowed.

The total number of claims (and the number of independent claims) in the present application is the same as before. Accordingly, it is believed that no extra claims fee is required on account of this Preliminary Amendment. However, if there are any fees due in connection with this paper, they may be charged to Deposit Account No. 14-1131.

All correspondence and telephone inquiries should be directed to the applicant's undersigned attorney.

Respectfully submitted,



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